

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022070**Date Inspected:** 22-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 14, OBG 13BW (NWIT # 08592)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3014H-172, 177, 182, 187, 192, 197, 202, 207, 212, 217, 222, 227, 173, 178, 183, 188, 193, 198, 203, 208, 213, 218, 223, 228

SEG3014F-144, 145, 139, 140, 134, 135, 129, 130, 124, 125, 119, 120, 114, 115, 109, 110, 104, 105, 099, 100, 094, 095, 089, 090, 084, 085, 143, 138, 133, 128, 123, 118, 113, 108, 103, 098, 093, 088, 083

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

OBG Seg 14W:

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The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020AY-117 [I-rib stiffener on Side Panel (SP) 3132A to stiffener RS3517N, complete joint penetration (CJP) weld at PP127]. The welder is identified as 045175 and was observed welding in 3G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with welding procedure specification (WPS): B-T-2233-ESAB.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: Seg3020BB-020 [Top anchorage plate (AP) 3014A to Vertical Shear Plate sub-assembly (SA3445A), CJP weld in between panel point PP125 to PP126]. The welders are identified as 045246 and 051348 and were observed welding in 4G position. ZPMC QC was identified as An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1. See attached photograph for more detail.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: Seg3020BB-038 [Top anchorage plate (AP) 3014A to Vertical Shear Plate sub-assembly (SA3447A), CJP weld in between panel point PP125 to PP126]. The welders are identified as 067765 and 067609 and were observed welding in 4G position. ZPMC QC was identified as An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020AG-009 [Edge Plate (EP) 3030D to Edge Panel (EP) 3030E, CJP weld from PP127 to PP128]. The welder is identified as 067942 and was observed welding in 4G position. ZPMC QC was identified as Mr. Zhu Lin. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-B-U2-FCM-1.

The SMAW process on weld joint no: SEG3020AJ-290 [I-rib stiffener (RS3517P) to BP3089A/3090A, CJP weld in between PP127.5 to PP128]. The welder is identified as 037779 and was observed welding in 2G position. ZPMC QC was identified as An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2212-Tc-U4b-FCM-1.

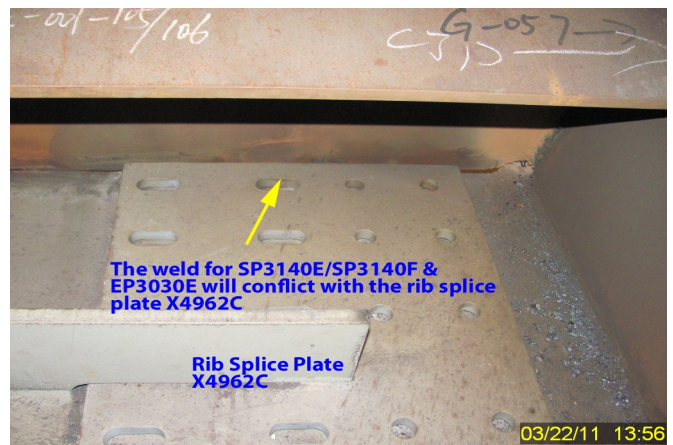
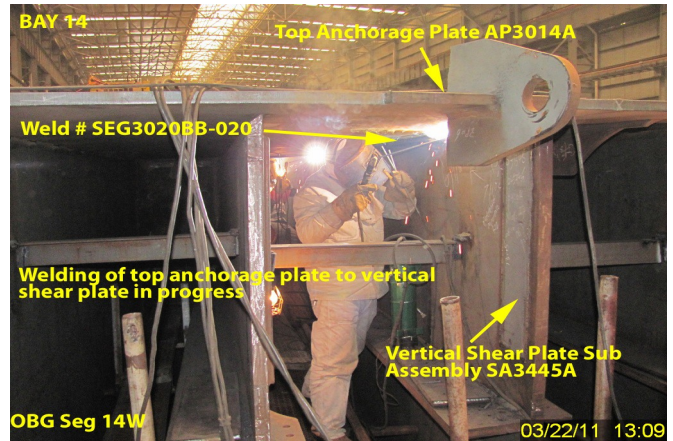
During random in process inspection this QA inspector observed the installation of Bottom Plate Sub Assembly SA8509A at Panel Point 128.7 of segment 14W. See attached photographs for more details.

During random in process inspection this QA inspector observed that for OBG Ifit 14 PP128~PP128.3, since the weld for SP3140E/SP3140F & EP3030E will conflict with the rib splice plate X4962C, and there will be about 600mm length cannot be weld. This issue has been discussed with ZPMC CWI Mr. An Qing Xiang, AB/F QA Mr. Xiao Jun Peng and CT Lead QA. ZPMC CWI Mr. An Qing Xiang informed this QA that this issue would be solved in manner compliant with contract documents. See attached photographs for more details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Umesh

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer